

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
NEWPORT NEWS DIVISION

ORBITAL AUSTRALIA PTY LTD
and
ORBITAL FLUID TECHNOLOGIES,
INC.,

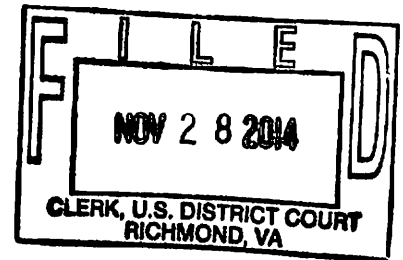
Plaintiff(s),

Civil Action No. 3:14cv808

JURY TRIAL DEMANDED

DAIMLER AG,
MERCEDES-BENZ USA LLC,
MERCEDES-BENZ US
INTERNATIONAL INC.,
ROBERT BOSCH GMBH, and
ROBERT BOSCH LLC,

Defendant(s).



COMPLAINT FOR PATENT INFRINGEMENT

This is a civil action for patent infringement by Orbital Australia Pty Ltd and Orbital Fluid Technologies, Inc. (collectively, "Orbital") against Daimler AG, and its United States subsidiaries, Mercedes-Benz USA, LLC and Mercedes-Benz U.S. International, Inc. (collectively, "Mercedes"), and Robert Bosch GmbH and its United States subsidiary Robert Bosch LLC (collectively, "Bosch"), for infringement of United States Patents No. 6,923,387 (the "387 patent") ("injector patent"), 5,655,365 (the "365 patent"), and the 5,606,951 (the "951 patent") ("control patents"), under 35 U.S.C. § 271. Orbital seeks a judgment that Mercedes and Bosch have infringed its patents, compensatory damages, permanent injunctive relief preventing Mercedes and Bosch from using the patented inventions, or a compulsory license fee if the Court

determines that injunctive relief is not appropriate. By and through its undersigned counsel, Orbital alleges as follows:

THE PARTIES

1. Plaintiff Orbital Fluid Technologies, Inc. is a Delaware corporation with operations at 201 Enterprise Dr., Newport News, Virginia, 23603.
2. Plaintiff Orbital Australia Pty Ltd is an Australian company with its principle place of business at 4 Whipple St., Balcatta, Western Australia, 6021.
3. Upon information and belief, Defendant Daimler AG is a corporation organized under the laws of Germany with its principle place of business at Mercedesstr. 137, 70327 Stuttgart, Germany.
4. Upon information and belief, Defendant Mercedes-Benz USA, LLC is a Delaware limited liability company with its principle place of business at One Mercedes Drive, Montvale, New Jersey, 07645.
5. Upon information and belief, Defendant Mercedes-Benz U.S. International, Inc. is an Alabama corporation with its principle place of business at One Mercedes Drive, Vance, Alabama, 35490.
6. Upon information and belief, Defendant Robert Bosch GmbH is a limited liability company organized under the laws of Germany with its principle place of business at Robert-Bosch-Platz 1, 70839 Gerlingen, Germany.
7. Upon information and belief, Defendant Robert Bosch LLC, is a Delaware limited liability company with its principle place of business at 3800 Hills Tech Drive, Farmington Hills, Michigan, 48331.

JURISDICTION AND VENUE

8. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a) because this action arises under the patent laws of the United States.

9. The Court has personal jurisdiction over Mercedes under Virginia Code § 8.01-328.1 because it has sufficient minimum contacts with the forum, resulting from its regular transaction of business within the Commonwealth of Virginia and within the Eastern District of Virginia. Mercedes has twelve dealerships in Virginia; nine of which are located within the Eastern District of Virginia. Through these dealerships, Mercedes established direct contacts with Virginia residents. Mercedes's efforts in advertising online and through these established locations demonstrate that the corporation established the requisite minimum contacts in Virginia. Additionally, upon information and belief Mercedes, including Daimler AG and Mercedes-Benz U.S. International, Inc., manufactures vehicles to be imported into, and sold within, the Commonwealth of Virginia.

10. Upon information and belief, the Court has personal jurisdiction over Bosch under Virginia Code §8.01-328.1 because it has sufficient minimum contacts with the forum resulting from its sale of infringing fuel injectors to Mercedes dealerships within the Commonwealth of Virginia and within the Eastern District of Virginia.

11. Venue is proper in this district under 28 U.S.C. §§ 1391 and 1400(b) and Local Civil Rule 3(C) on information and belief that the Defendants have transacted and do business within the Commonwealth of Virginia and within the Eastern District of Virginia, and because part of the work that lead to the patented inventions occurred in this judicial district and division.

BACKGROUND

12. Orbital is a specialized engine and vehicle systems innovation company with 30 years of experience in advanced technology and product development. Such technology and

product developments have been embedded in a wide array of engine and vehicle products around the world. Orbital is focused on finding high efficiency, low emission, world class solutions for customers in the following industries: automotive, powered recreation, industrial, resources, government, aerospace, and in other segments. Orbital employed the original designers of the claimed inventions of the '387, '365, and '951 patents.

13. Orbital began developing and using centrally-mounted, spray-guided direct fuel injection systems in the early 1980's. Orbital used direct injectors in 2 stroke engines and was seen as a world leader in making internal combustion engines cleaner and more fuel efficient. In 1995, Mercedes expressed interest in Orbital's technology and began evaluating the Orbital Combustion Process (OCP) on a 4 stroke Mercedes engine. Thereafter, Orbital and Mercedes established a working relationship focused on applying the OCP technology to a dedicated 4 stroke engine system to improve fuel efficiency and emissions.

14. By 1995, the '365 patent ("Method of Operating an Internal Combustion Engine") and '951 patent ("Engine Air Supply Systems") had been filed.

15. In 1997, the Synerject LLC joint venture was formed by Orbital and Siemens (later Continental), to provide original equipment manufacturers in the marine, motorcycle and recreation industries with gasoline Engine Management Systems (EMS) and fuel system components.

16. In the 1997/98 timeframe, Orbital incorporated the OCP into a Mercedes engine and tested its performance. One of the main technical issues with direct injection systems is the effect of carbon deposits that build up on the injector as a result of fuel combustion. The carbon deposits negatively affect the spray pattern of the spray guided direct injectors.

17. From 1999-2002, Orbital worked on improvements for deposit control in fuel injector nozzles. Part of this work occurred in the Synerject facility at Newport News Virginia. This became the subject of the '387 ("Deposit Control In Fuel Injector Nozzles"), filed in 2000.

18. Orbital presented the patented technology for deposit control in fuel injector nozzles to Mercedes in great technical detail.

19. In 2001, Orbital presented at least part of the control strategy claimed in the '365 patent to Mercedes representatives during a visit to Orbital.

20. In 2002, Orbital delivered a demonstrator vehicle to Mercedes. This vehicle included the patented injector features. Shortly thereafter, Mercedes advised Orbital that they would not be proceeding with the Orbital project.

21. Mercedes has since released numerous versions of vehicles in the United States that include engines with a centrally-mounted, spray-guided direct injection system using Bosch injectors that infringe the claimed features of the '387 patent. Upon information and belief, Mercedes has also sold vehicles in the United States that infringe the patented methods and systems of the '365 and '951 patents.

22. Orbital offered Bosch a license for use of several of its injector patents in 2011, including the '387 patent, which Bosch declined.

23. Synerject currently advertises on its website that its global headquarters is in Newport News, Virginia. Synerject advertises that its Newport News facility is a 60,000 ft² production and design center that manufactures fuel systems, modules, and components.

COUNT I

Patent Infringement of U.S. Patent 6,923,387

24. Orbital re-alleges and incorporates by reference the allegations of paragraphs 1-23 as if fully set forth herein.

25. On August 2, 2005, U.S. Patent No. 6,923,387 (the '387 patent), entitled "Deposit Control in Fuel Injector Nozzles" was duly and legally issued by the United States Patent and Trademark Office. The '387 patent is valid and enforceable.

26. Orbital owns all rights, title, and interest in and to the '387 patent. Pursuant to 35 U.S.C. § 154(a)(1), Orbital has the right to exclude others from making, using, offering for sale, or selling the invention disclosed in the '387 patent, including the right to bring this action for damages and injunctive relief.

1. Mercedes

27. Upon information and belief, in violation of 35 U.S.C. § 271, Defendants Mercedes, including their affiliates, have directly infringed and continue to directly infringe, both literally and under the doctrine of equivalents, one or more claims of the '387 patent, by, without limitation, making, using, importing, selling, and/or offering for sale automobiles, incorporating fuel injectors with deposit control technology that include all of the limitations of one or more of the claims of the '387 patent, within the Eastern District of Virginia and elsewhere within the United States.

28. Upon information and belief, Defendants Mercedes actively induce, under 35 U.S.C. § 271, third-party manufacturers, distributors, importers and/or consumers that purchase or sell vehicles incorporating fuel injectors with deposit control technology, that include all of the limitations of one or more of the claims of the '387 patent, to directly infringe one or more claims of the '387 patent.

29. Mercedes has knowledge of the '387 patent since, at least, as of the filing of this complaint. Additionally, upon information and belief, Defendants Mercedes obtained knowledge of the '387 patent and its existence during its prior extensive business relationship

with Orbital; including through Orbital presentations to Mercedes which included the patented technology.

30. Mercedes' acts of infringement have caused damage to Orbital, and Orbital is entitled to recover damages in an amount subject to proof at trial.

31. Orbital has been, and continues to be, damaged and irreparably harmed by Mercedes' infringement, which will continue unless Mercedes is enjoined by this Court.

2. Bosch

32. Upon information and belief, in violation of 35 U.S.C. § 271, Defendants Bosch, have directly infringed and continue to directly infringe, both literally and under the doctrine of equivalents, one or more claims of the '387 patent, by, without limitation, making, using, importing, selling, and/or offering for sale, fuel injectors with deposit control technology, for use in internal combustion engines, that include all of the limitations of one or more of the claims of the '387 patent, within the Eastern District of Virginia and elsewhere within the United States.

33. Upon information and belief, Defendants Bosch actively induce, under 35 U.S.C. § 271, third-party manufacturers, distributors, importers and/or consumers that purchase or sell fuel injectors with deposit control technology, that include all of the limitations of one or more of the claims of the '387 patent, to directly infringe one or more claims of the '387 patent.

34. Bosch has knowledge of the '387 patent since, at least, as of the filing of this complaint. Additionally, upon information and belief, Defendants Bosch obtained knowledge of the '387 patent and its existence in 2011, through a licensing offer made by Orbital to Bosch, for the use of the patented technology, including specifically the '387 patent.

35. Bosch's acts of infringement have caused damage to Orbital, and Orbital is entitled to recover damages in an amount subject to proof at trial.

36. Orbital has been, and continues to be, damaged and irreparably harmed by Bosch's infringement, which will continue unless Bosch is enjoined by this Court.

COUNT II

Patent Infringement of U.S. Patent No. 5,655,365

37. Orbital re-alleges and incorporates by reference the allegations of paragraphs 1-36 as if fully set forth herein.

38. On August 12, 1997, U.S. Patent No. 5,655,365 (the '365 patent), entitled "Method of Operating an Internal Combustion Engine" was duly and legally issued by the United States Patent and Trademark Office. The '365 patent is valid and enforceable.

39. Orbital owns all rights, title, and interest in and to the '365 patent. The '365 patent expired on August 12, 2014. However, Orbital remains entitled to collect damages for past infringement occurring during the term of the '365 patent pursuant to 35 U.S.C §§ 284 and 286.

1. Mercedes

40. Upon information and belief, in violation of 35 U.S.C. § 271, Defendants Mercedes, including their affiliates, have directly infringed, both literally and under the doctrine of equivalents, one or more claims of the '365 patent, by, without limitation, making, using, importing, selling, and/or offering for sale automobiles that implement control systems for operating an internal combustion engine which practice all of the limitations of one or more of the claims of the '365 patent, within the Eastern District of Virginia and elsewhere within the United States.

41. Mercedes' acts of infringement during the term of the patent have caused damage to Orbital, and Orbital is entitled to recover past damages in an amount subject to proof at trial.

2. Bosch

42. Upon information and belief, in violation of 35 U.S.C. § 271, Defendants Bosch, including their affiliates, have directly infringed, both literally and under the doctrine of equivalents, one or more claims of the '365 patent, by, without limitation, making, using, importing, selling, and/or offering for sale control systems for operating an internal combustion engine that practice all of the limitations of one or more of the claims of the '365 patent.

43. Bosch's acts of infringement during the term of the patent have caused damage to Orbital, and Orbital is entitled to recover past damages in an amount subject to proof at trial.

COUNT III

Patent Infringement of U.S. Patent No. 5,606,951

44. Orbital re-alleges and incorporates by reference the allegations of paragraphs 1-43 as if fully set forth herein.

45. On March 4, 1997, U.S. Patent No. 5,606,951 (the '951 patent), entitled "Engine Air Supply" was duly and legally issued by the United States Patent and Trademark Office. The '951 patent is valid and enforceable.

46. Orbital owns all rights, title, and interest in and to the '951 patent. The '951 patent expired on June 29, 2014. However, Orbital remains entitled to collect damages for past infringement occurring during the term of the '951 patent pursuant to 35 U.S.C §§ 284 and 286.

1. Mercedes

47. Upon information and belief, in violation of 35 U.S.C. § 271, Defendants Mercedes, including their affiliates, have directly infringed, both literally and under the doctrine of equivalents, one or more claims of the '951 patent, by, without limitation, making, using, importing, selling, and/or offering for sale automobiles which implement air supply control to an internal combustion engine that practice all of the limitations of one or more of the claims of the '951 patent, within the Eastern District of Virginia and elsewhere within the United States.

48. Mercedes' acts of infringement during the term of the patent have caused damage to Orbital, and Orbital is entitled to recover past damages in an amount subject to proof at trial.

2. Bosch

49. Upon information and belief, in violation of 35 U.S.C. § 271, Defendants Bosch, including their affiliates, have directly infringed, both literally and under the doctrine of equivalents, one or more claims of the '951 patent, by, without limitation, making, using, importing, selling, and/or offering for sale control systems for operating an internal combustion engine that practice all of the limitations of one or more of the claims of the '951 patent.

50. Bosch's acts of infringement during the term of the patent have caused damage to Orbital, and Orbital is entitled to recover past damages in an amount subject to proof at trial.

DEMAND FOR JURY TRIAL

Orbital hereby demands a jury in accordance with Rule 38 of the Federal Rules of Civil Procedure.

PRAYER FOR RELIEF

Wherefore, Orbital requests the Court to enter judgment for it and against Mercedes holding that:

- A. Mercedes has infringed the '387, '365, and '951 patents;
- B. Orbital be awarded royalty and lost-profit based damages adequate to compensate them for Mercedes' infringement of the '387, '365, and '951 patents, such damages to be determined by a jury;
- C. Mercedes, its officers, agents, employees, and those persons in active concert or participation with it or any of them, and its successors and assigns, be permanently enjoined from continued acts of infringement of the '387 patent, including but not limited to an injunction against making, using, selling, and/or offering for sale

within the United States, and/or importing into the United States, any products that infringe the '387 patent;

D. Bosch has infringed the '387, '365, and '951 patents;

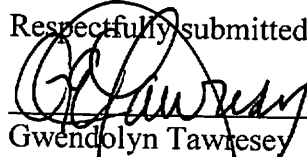
E. Orbital be awarded royalty and lost-profit based damages adequate to compensate them for Bosch's infringement of the '387, '365, and '951 patents, such damages to be determined by a jury;

F. Bosch, its officers, agents, employees, and those persons in active concert or participation with it or any of them, and its successors and assigns, be permanently enjoined from continued acts of infringement of the '387 patent, including but not limited to an injunction against making, using, selling, and/or offering for sale within the United States, and/or importing into the United States, any products that infringe the '387 patent; and

G. Orbital be awarded such other and further relief as this Court deems just and proper.

Dated: November 28, 2014

Respectfully submitted,



Gwendolyn Tawresey
Virginia Bar No. 84526
Pepper Hamilton LLP
Hamilton Square
600 Fourteenth Street, N.W.
Washington, D.C. 20005-2004
Telephone: 202.220.1282
Facsimile: 202.220.1665
Email: tawreseg@pepperlaw.com

William Belanger
(*pro hac vice* motion to be filed)
Gregory Len

(pro hac vice motion to be filed)

Griffin Mesmer

(pro hac vice motion to be filed)

Pepper Hamilton LLP

19th Floor, High Street Tower

125 High Street

Boston, MA 02110-2736

Telephone: 617.204.5100

Facsimile: 617.204.5150

Email: belangew@pepperlaw.com

leng@pepperlaw.com

mesmerg@pepperlaw.com

***Attorneys for Plaintiffs Orbital Australia PTY
LTD and
Orbital Fluid Technologies, Inc.***